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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/600,190 | 06/20/2003 | Keith J. Brodie | M-15536-3C US | 8790 |
| 32605 | 7590 | 06/23/2006 | EXAMINER | |
| MACPHERSON KWOK CHEN & HEID LLP 1762 TECHNOLOGY DRIVE, SUITE 226 SAN JOSE, CA 95110 | | | MANCHO, RONNIE M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3663 | |

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/600,190

Applicant(s)

BRODIE, KEITH J.

Examiner

Ronnie Mancho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remark

1. Upon review of the amendment submitted 5-3-06, it is deemed that a non-final office action is necessary. With regard to this communication, the notice of allowance submitted 6-8-06 has been withdrawn. Any inconvenience to the applicant is regretted.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-8 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6611757; claims 1-20 of U.S. Patent No. 6427121; claims 1-11 of U.S. Patent No. 6301545. Although the conflicting claims are not identical, they are not patentably distinct from each other because the structure of the claimed subject matter of the present application is disclosed in the above named patents. As an example,

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the above named patents all disclose an interrogator and a transponder which are capable of performing the steps disclosed in the present application..

4. Claims 1-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of copending Application No. 2002/0138199, and claims 1-23 of copending Application No. 2001/0039475. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the application encompass the claims of the PG publication.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is not clear what all is meant and encompassed by the phrase, “the correlation snap shot comprises a set of fixed–point correlator sums and a range offset in chips”. Although the specification disclose the above phrase, there is no explanation of the meaning of the claimed limitation, “the correlation snap shot comprises a set of fixed–point correlator sums and a range offset in chips”

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In claim 5, it is not clear what all is meant and encompassed by "passive standby circuit". Although mention in the specification and disclosed in the drawings, the meaning of the above limitation is not provided.

The rest of the claims are rejected for depending on a rejected base claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

8. Claims 1-3, 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Krasner

(5781156)

Regarding claim 1, Krasner discloses a communications system (fig. 1A) for determining the position of an object (20, mobile remote unit), said system comprising:

an interrogator (10, base or reference station) remote from the object 20, the interrogator adapted to:

receive GPS signals from GPS satellites (see GPS antenna 12, fig. 1; col. 7, lines 57-60);

for one of the GPS satellites associated with the GPS signals, transmit pre-positioning data (i.e. positioning data e.g. Doppler shifts, pseudorange "col. 6, line 25",

etc is pre-established or computed first by the interrogator i.e. "base station 10" and sent to the object 20 before an accurate position of the object 20 is computed using the pre-computed sent data. See data link 16, fig. 1A) for the GPS satellite, including a pseudorandom noise (PRN) code number (see unique Gold code or C/A code for civilian applications, col. 2, lines 2-14, i.e. each satellite is given a number or unique Gold code for identification of that particular satellite; col. 11, lines 17-21; col. 5, lines 66 to col. 6, lines 1-2), a Doppler frequency offset (col. 11, lines 60-66) and a code phase offset (col. 11, lines 28-35; col. 5, lines 66 to col. 6, lines 1-2) and a tracking signal (see satellite identity, col. 6, lines 21-26; col. 11, lines 61-66) including reference time (epoch, col. 5, lines 66 to col. 6, lines 1-2) and frequency information (col. 11, lines 17-20; col. 5, lines 66 to col. 6, lines 1-10); and

determine a pseudorange (col. 11, lines 28-35) associated with a received correlation snapshot (a snap shot is the collection of data such as PRN or PN frames in a given period of time; col. 11, lines 28-35; col. 12, lines 10-12), wherein the correlation snap shot comprises a set of fixed-point correlator sums and a range offset in chips; and a transponder (i.e. all the circuit blocks disposed on mobile unit 20) positioned on the object (mobile unit 20), the transponder adapted to:

receive (i.e. at 26, 22) the pre-positioning data and the tracking signal (see data link 16, fig. 1A; col. 11, lines 61 thru col. 12);

collect RF samples of the GPS signals (col. 11, lines 61 thru col. 12);

correlate (col. 12, lines 61-67) the RF samples of the GPS signal against replicas of a GPS signal based on the PRN code number, the Doppler frequency offset, and the

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code phase offset in the pre-positioning data and the reference time and frequency information in the tracking signal to produce the correlation snapshot (col. 1, lines 66 thru col. 2, lines 1+; col. 12, lines 61+); and

transmit (fig. 3, col. 12, lines 49 thru col. 13, lines 1+) the correlation snapshot to the interrogator (10, base or reference station).

Regarding claim 2, Krasner discloses the system of claim 1 wherein the transponder (all the circuit blocks disposed on mobile unit 20) comprises a two-bit (e.g. 1 or 0; col. 10, lines 37-40; fig. 2A) sampler for collecting the RF samples.

Regarding claim 3, Krasner discloses the system of claim 1 wherein the interrogator 10 is further adapted to transmit a wake-up signal (command to initialize, col. 11, lines 61-65; initialization data, col. 6, lines 16-30) prior to transmitting the pre-positioning data and the tracking signal, and the transponder (i.e. all the circuit blocks disposed on mobile unit 20) comprises:

processing circuitry (fig. 1A); and

a power subsystem adapted to maintain the processing circuitry in a power-off mode prior to receipt of the wake-up signal (col. 5, lines 39-51).

Regarding claim 8, Krasner discloses the system of claim 1 wherein the code replicas (col. 12, lines 7-28; see repetitive signal; col. 1, lines 65 thru col. 2, lines 1-25) are generated by

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the transponder (i.e. all the circuit blocks disposed on mobile unit 20) at regular offsets (repetition period of 1023 chips, col. 2, lines 6) of some fraction of a C/A code chip.

In claims 1-8, the statements of intended use or field of use, "adapted to", "receive", "associate", "determine", "collect", "correlate", "transmit", "transmit a wake-up signal prior to", "maintain", "switched off", etc clauses are essentially method limitations or statements of intended or desired use. Thus, these claims as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference. See *In re Pearson*, 181 USPQ 641; *In re Yanush*, 177 USPQ 705; *In re Finsterwalder*, 168 USPQ 530; *In re Casey*, 512 USPQ 235; *In re Otto*, 136 USPQ 458; *Ex parte Masham*, 2 USPQ 2nd 1647.

See MPEP § 2114 which states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ 2nd 1647

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. *In re Danly*, 120 USPQ 528, 531.

Apparatus claims cover what a device is not what a device does. *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 15 USPQ2d 1525, 1528.

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

Response to Arguments

9. Applicant's arguments filed 5/3/06 have been fully considered but they are not all persuasive.

The applicant is arguing that the examiner does not provide any substantive grounds for rejecting claims 4-7. In response, claims 4-7 have been rejected for depending on a rejected base claim.

Although repeated here, It had been noted in the last office action that the argued limitations are drawn to method limitations in an apparatus claim.

The prior art apparatus is capable of performing the claimed limitations.

Thus, the rejections are proper and stand.

Communication

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronnie Mancho whose telephone number is 571-272-6984. The examiner can normally be reached on Mon-Thurs: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ronnie Mancho
Examiner
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6/20/06

A handwritten signature in black ink, appearing to read "Ronnie Mancho". The signature is written in a cursive, flowing style.